

TELEGRAPH STATISTICS

OF THE

DOMINION OF CANADA

FOR THE

YEAR ENDED JUNE 30

1912

A. W. CAMPBELL,

Deputy Minister of the Department of Railways and Canals.

PRINTED BY ORDER OF PARLIAMENT



OTTAWA

PRINTED BY C. H. PARMELEE, PRINTER TO THE KING'S MOST
EXCELLENT MAJESTY

1913

[No. 20F—1913.]

To Field Marshal His Royal Highness Prince ARTHUR WILLIAM PATRICK ALBERT, Duke of Connaught and Strathearn, and Earl of Sussex, in the Peerage of the United Kingdom, Prince of the United Kingdom of Great Britain and Ireland, Duke of Saxony, Prince of Saxe-Coburg and Gotha; Knight of the Most Noble Order of the Garter; Knight of the Most Ancient and Most Noble Order of the Thistle; Knight of the Most Illustrious Order of Saint Patrick; one of His Majesty's Most Honourable Privy Council; First and Principal Knight Grand Cross and Great Master of the Most Honourable Order of the Bath; Knight Grand Commander of the Most Exalted Order of the Star of India; Knight Grand Cross of the Most Distinguished Order of Saint Michael and Saint George; Knight Grand Commander of the Most Eminent Order of the Indian Empire; Knight Grand Cross of the Royal Victorian Order; Personal Aide-de-Camp to His Majesty the King; Governor General and Commander-in-Chief of the Dominion of Canada.

MAY IT PLEASE YOUR ROYAL HIGHNESS,—

The undersigned has the honour to present to Your Royal Highness Telegraph Statistics for the year ended June 30, 1912.

F. COCHRANE,
Minister of Railways and Canals.

To the Honourable F. COCHRANE,
Minister of Railways and Canals.

SIR,—I have the honour to submit the first report of the Comptroller of Statistics, in relation to the operations of Telegraph Companies in the Dominion of Canada for the year ended June 30, 1912.

I have the honour to be, sir,

Your obedient servant,

A. W. CAMPBELL,

Deputy Minister of Railways and Canals.

OFFICE OF THE COMPTROLLER OF STATISTICS

OTTAWA, Dec. 5, 1912.

A. W. CAMPBELL, Esq., C.E.,
Deputy Minister of Railways and Canals.

SIR,—I have the honour to submit herewith my first statistical report on the telegraph interests of Canada, covering operations for the year ended June 30, 1912.

The statistics appended hereto were required from telegraph companies under authority of an amendment to the Railway Act, passed by Parliament in 1911. They relate entirely to companies engaged in the commercial telegraph business, and have no reference to railway telegraph interests. That is to say, companies which conduct both a commercial and railway telegraph have reported only in relation to the commercial aspect.

In the preparation of schedules it was necessary to create reporting bases. The question of uniformity did not arise, since it is not known that any other country has in force a comprehensive scheme of telegraph statistics. It was deemed expedient in this situation to make the reporting forms as simple as possible. Elaboration may take place as suggested by experience. For the primary report, schedules were prescribed having reference to:

- Organization.
- Capitalization.
- Cost of Property and Equipment.
- Revenue from Operation.
- Operating Expenses.
- Balance Sheet.
- Pole Mileage.
- Wire Mileage.
- General Statistics.

Reports were received from fourteen companies out of fifteen doing business in Canada. These corporations are broadly divided into cable companies, land telegraph companies and cable and land telegraph companies combined. The cable companies are as follows:—

- Anglo-American Telegraph Company.
- American Telegraph and Cable Company.
- Commercial Cable Company.
- Direct United States Cable Company.
- Halifax and Bermudas Cable Company.
- Pacific Cable Board.

The telegraph companies operating on land are:—

- Anglo-American Telegraph Company.
- Canadian Northern Telegraph Company.
- Canadian Pacific Railway Company's Telegraph.
- Dominion Government Telegraph Service.

3 GEORGE V., A. 1913

Grand Trunk Pacific Telegraph Company.
Great North Western Telegraph Company of Canada.
North American Telegraph Company.
Temiskaming and Northern Ontario Railway Commission.
Western Union Telegraph Company.

The Marconi Wireless Telegraph Company of Canada occupies a unique field, in that it operates both on land and water and cannot be classified with the other telegraph organizations. The Anglo-American Telegraph Company also provides both a land and cable service.

Geographically, it might be said that the Maritime Provinces are served by the Western Union, the Canadian Pacific and the Anglo-American Companies, although the last named is leased and operated by the Western Union. The Dominion Government operates lines in the unsettled sections of the lower Provinces, chiefly as aids to navigation. The Central Provinces of Ontario and Quebec are served by the Great North Western, the Canadian Pacific and the North American Companies, as well as by the Temiskaming & Northern Ontario Railway Commission. The Western Provinces have the lines of the Canadian Pacific, the Great North Western, the Grand Trunk Pacific, the Canadian Northern and the Dominion Government.

HISTORICAL DATA.

In presenting this first statistical report, it is fitting that a general sketch should be given of the various telegraph companies the interests of which are dealt with in tabular and other form. It is clear that the Great North Western Telegraph Company of Canada represents the combination of pioneer units in the telegraph field, and because of that important fact a somewhat lengthy sketch has been procured from Mr. A. C. McConnell, the Secretary of that Company. It was written by Mr. A. F. Easson, whose identification with Canadian telegraph interests began as far back as 1849. Mr. Easson's historical contribution is as follows:—

THE MONTREAL TELEGRAPH COMPANY.

As early as 1846, T. D. Harris, a hardware merchant of Toronto, and a few public spirited Canadian gentlemen associated themselves into a company to secure the construction of a line of Morse telegraph between Toronto and Niagara, via Hamilton and St. Catharines. The money needed was easily raised, and when at last the company was fully organized it was named 'The Toronto, Hamilton, Niagara & St. Catharines Electro Magnetic Telegraph Company,' with a capital of \$16,000, and for which a suitable charter was procured. The line was built by Samuel Porter, long and favourably known in United States telegraphic circles. It will be remembered that a telegraph line between Washington and Baltimore was first opened for public business in the United States on April 1st, 1845. Up to that date the line had been worked by Prof. Morse and his associates as a curiosity. Mr. Porter suspended a wire across the Niagara River to connect the wire at Queenston with Lewiston, N.Y., and built for this first Canadian Telegraph Company an honest and well appointed line. After its completion he served for a time as its Superintendent, and was later on succeeded by Percy R. Marling. Meanwhile, on the American side, David Kissock constructed a line connecting the Canadian Company's wires with Buffalo, N.Y., with William Kissock as Manager at Buffalo, and in 1852 both properties were purchased by the Montreal Telegraph Company, which

SESSIONAL PAPER No. 20f

had meanwhile been organized for the purpose of connecting telegraphically all the chief centres of Canadian commerce.

The Montreal Telegraph Company was organized in Montreal in 1847, with a capital of \$60,000, and in March of that year Mr. O. S. Wood was invited to become its Superintendent. The company was meanwhile incorporated under a liberal charter granted by the Provincial legislature, and Andrew Shaw, a gentleman of enterprise and energy, was elected its first President. About the same time H. P. Dwight and James Dakers, the later afterwards Secretary of the company, entered its service.

The appointment of Mr. Wood was in every way fortunate for the company. He had studied under Prof. Morse and was his first pupil. He had been connected with his brother-in-law, Mr. Ezra Cornell (who later on founded Cornell University) in the construction of American lines, and had all the practical information and experience needed in his new position. In actual work, also as an operator, in the construction and operation of the experimental lines at Washington and New York, and in erecting the first business line between Buffalo and New York in the fall of 1845, he had become familiar with all the necessities of an efficient telegraphic structure. Mr. Wood was also a man of the highest character and thoroughly comprehended his mission.

The construction of the line, which was at first limited to the territory between Quebec and Toronto, was assigned to Livingston & Wells, the well known Express men of New York. In this also the Montreal Telegraph Company was fortunate, inasmuch as it assured them the faithful fulfillment, by experienced builders, of an important service. The result of these favorable facts was that the line of the Montreal Telegraph Company, when completed, was the first on this continent which united in it from the very start the conditions of success. The internal arrangements were also similarly complete. The instruments with which the offices were furnished were, of course, of the Morse apparatus, and were constructed by S. W. Chubbuck & Son, of Utica, N.Y., from models approved by Mr. Wood, and were of the finest workmanship, strong and durable. The reception of messages by sound had not yet been inaugurated, and was indeed still regarded with much apprehension. Recording registers were, therefore, supplied for every office. During the eighteen years of Mr. Wood's wise and prudent administration this state of thorough efficiency was preserved and gave the line a character for promptitude and reliability which established the Company as one of the most vigorous and useful of the social and commercial organizations of the country. At the close of 1847 the Montreal Telegraph Company worked 540 miles of wire, had nine offices, employed thirty five persons and had sent, in all, 33,000 messages.

In 1847, Frederick Gisborne, a gentleman who early interested himself in the subject of Atlantic cable communication, started 'The British North American Electric Association.' It was designed under this organization to erect a telegraph line to connect Quebec with the lower Provinces and finally with the Atlantic coast. It was built, however, only as far as River Du Loup, 112 miles below Quebec, and there rested for some years. It was afterwards extended by John A. Torney to Woodstock, N.B. and there formed a connection with the American Telegraph Company, which, by that time had leased the lines of the Eastern Provinces. The capital stock of this Company, or Association, was \$25,000. A second organization bearing the same corporate name constructed a line from Quebec to Montreal, which was, however soon after, amalgamated with the Eastern Company. These enterprises proved so utterly unproductive that the lines East of Quebec became the property of the Mon-

3 GEORGE V., A. 1913

treal Telegraph Company, without charge, and the Quebec and Montreal section was purchased by the same company at one third of its cost.

About the same time, Hon. Malcolm Cameron interested himself in the construction of a line from Hamilton to London: but after a doubtful existence of eighteen months, it was abandoned and soon disappeared.

In 1849 The Montreal and Troy Telegraph Company was organized, and built a line from Montreal to the Canadian frontier and thence, via Whitehall to Troy, under what was called 'The Troy and Canada Junction Telegraph Company.' These lines were built and the Company organized by Ezra and Alonzo B. Cornell, and were worked for several years as one line in connection with the Montreal Telegraph Company. Mr. A. B. Cornell, who was a son of Ezra Cornell, during the first two years after their construction, was the Manager of the Montreal office. Mr. A. B. Cornell later on became Governor of New York State. The section of this line north of Whitehall, N.Y., became, after a few years, under a compact with the leading American lines, a part of the property of the Montreal Telegraph Company. In like manner the lines of the Vermont and Boston Telegraph Company from Rouses Point to Montreal and Ogdensburg, N.Y. were acquired first by lease and then by purchase. During all this period a number of minor companies were started here and there throughout the Provinces, all of which about as speedily expired. One of these which showed a more promising vitality was a company organized in 1850 by Joseph Aumond, and others, to construct a line of telegraph from Montreal to Bytown, now Ottawa, a distance of 125 miles. But life went roughly with it, and after a few hard fought years it was purchased by the Montreal Telegraph Company at a merely nominal price. A new impetus was given to telegraph line building in the Provinces by the passage in 1852 by the Canadian Legislature of a general telegraph law. This led to the organization of 'The Grand Trunk Telegraph Company' (this concern had no connection with the Grand Trunk Railway) under which a line was built from Buffalo to Quebec and which promised a lively opposition. This Company, however, like its predecessors, dragged along during a few years when its lines were purchased by the Montreal Telegraph Company at a cost of \$11,000.

Before the Grand Trunk Telegraph Company became extinct, Mr. Weller, the proprietor of a line of stage coaches, which at that time ran between Toronto and Montreal, became financially interested in the concern and thinking to improve its fortunes had the name of the company changed to 'The International Telegraph Company;' but it did no better under this title and the end came as described. With marvellous vitality, however, the purchase of this line was followed by the building of another over the same ground under what was called 'The Provincial Telegraph Company,' an organization brought into being as a branch of the 'United States Telegraph Company,' which at that period was spreading rapidly and widely through the United States. This also survived a few years, when the United States Telegraph Company becoming, in 1866, absorbed by the Western Union Telegraph Company and the 'Provincial' sold out to the Montreal Telegraph Company.

Sir Hugh Allan, who had early interested himself in the fortunes of the Montreal Telegraph Company, became its President in 1851. It is no exaggeration to say that no one man made himself more thoroughly felt in the realm of enterprize in all its most public and prominent features in the history of Canada than did Sir Hugh Allan. He early selected the ocean steamship, the rail and the telegraph, as the three great leading channels in which to throw the weight of an unusually energetic character.

SESSIONAL PAPER No. 20f

Immediately on assuming the Presidency, Sir Hugh Allan, in concert with Mr. Wood, projected important extensions of the lines of the Company and urged the necessity and the propriety of extending the telegraph to the most remote points of the country. Lines to the frontiers of population were built. Places far remote from railroads and from the centres of commerce were made accessible, and at the close of 1875 the Company had in operation 20,000 miles of wire, 1,400 offices and 2,000 employees. The number of messages transmitted during the year preceding, in addition to millions of words in press dispatches, was 2,000,000. Under an enlightened policy and by the enlargement of the capital to \$2,000,000, to provide the means of communication wherever needed, the lines of the Montreal Telegraph Company, instead of their operation being limited to Toronto and Quebec as in 1847, were extended from Sackville, N. B. to Detroit, Mich., from Montreal to Portland, Me., from Montreal to Oswego, N. Y., from Toronto to Buffalo, N. Y., and to the most northerly boundaries of Ontario.

In 1865 Mr. O. S. Wood, after a long and honourable service, resigned, when Mr. James Dakers was appointed Superintendent of the Eastern, and Mr. H. P. Dwight, Superintendent of the Western Division of the Company's territory. The Montreal Telegraph Company could not have had a more faithful officer. There is nothing more marked in the history of the Montreal Telegraph Company than the high and faithful character of its executive officers. Still another example of this is to be found in Mr. H. P. Dwight, who has by great prudence and ability and by rare and intelligent vigour proved himself worthy of the highest trusts. To great fidelity Mr. Dwight added a clear and steady judgment which gave him much weight in the Executive management, and which led to perfect confidence in his administrative prudence and sagacity.

The Montreal Telegraph Company built its own offices at Quebec, Montreal, Ottawa and Toronto.

One of the most important measures carried out by the liberal policy of the Montreal Telegraph Company has been in the arrangement of its tariff. In doing this it has been, of course, much aided by its exceptional freedom from the drain caused by inferior construction, which in so many cases has periled the existence and maimed the service of so many companies. By absolutely refusing, also, all inducements to increase its stock, except in the acquisition and representation of actual property, it kept itself powerful for the most radical and aggressive measures. For some years prior to 1871 it had carefully and steadily reduced the basis of its tariffs as its facilities multiplied and its business increased. Thus, while the lines were extended to new regions, additional wires added to the trunk lines, new offices opened to meet public convenience and the capital enlarged to cover the cost of new property, the tariff was correspondingly lowered without impairing the average profits of the business. And when, in 1871, the Company found that the outside structure was measurably complete, that all available territory where population or commerce seemed to demand the telegraph, was covered, that the Company was utterly free from debt, it ordered on June 1st, 1871, the establishment of a uniform tariff of twenty five cents for ten words and one cent for each added word throughout its entire territory from Sarnia to Sackville. The only exception to this was an order to limit the charge on messages to places under twelve miles from any office to fifteen cents.

At the time of amalgamation with the Great North Western Telegraph Company in 1881, the Montreal Telegraph Company owned and operated 20,479 miles of wire, had 1,507 offices, 2,625 instruments and numbered in its employ 70 female and 2,267 male employees.

3 GEORGE V., A. 1913

The organization of the Company was as follows:—

President: SIR HUGH ALLAN.

Secretary: JAMES DAKERS.

Treasurer: CHARLES BOURNE.

Board of Directors.

George W. Campbell, M. D.

Peter Redpath,

Andrew Allan,

Hon. E. G. Penny,

General Eastern Superintendent—James Dakers, Montreal,

General Western Superintendent—H. P. Dwight, Toronto,

District Superintendents, N. W. Bethune, Ottawa; E. Pope, Quebec.

Sir Hugh Allan, the pioneer and mainstay of the Company in its early history, died in Edinburgh, Scotland, while on a visit to that city on the 9th of December, 1882. Mr. James Dakers, the faithful and capable Secretary and Superintendent, died in Montreal on the 15th of April, 1887, and Mr. O. S. Wood, the Company's first Superintendent, full of years and honours, passed away at the great age of ninety two at his home near New York City in 1906.

THE DOMINION TELEGRAPH COMPANY.

Mr. Selah Reeves, who had had considerable experience in starting telegraphic enterprises in the United States, began operations to found the Dominion Telegraph Company in 1868. The organization of the Company under that title took place in incipient form in that year under the general laws of Canada relative to Telegraph Companies. It was organized chiefly on subscriptions said to have been obtained in Clifton, Ontario. Mr. Reeves received the contract for the construction of the lines; but after a few hundred miles had been built the work proved to be so unsatisfactory that the stockholders, at a meeting held in Quebec in 1869, cancelled the contract. By that time a few men of energy who had been drawn into the enterprise determined to endeavour to save the property from ruin and make the Company a success. Under their management the contract for the further extension of the lines was given to E. Colby, of Oswego, N. Y., under a fair contract, and the wires were gradually extended until all points of importance between Buffalo, N. Y., Detroit and Quebec were connected. The Company was not thoroughly organized until January 11, 1870, when its annual meeting was held at Toronto. At that time the line was still very limited and incomplete, but had been freed from embarrassments and had been commended to public appreciation by the election of the following officers: Hon. J. McMurrich, President; J. I. McKenzie, Vice-President; Jas. Michie, Treasurer; Hon. J. H. Cameron, Consulting Counsel; Hon. M. C. Cameron, Solicitor and H. John Colles, Secretary. The Board of Directors comprised Hon. J. McMurrich A. R. McMaster. L. Moffatt, J. Michie, Hon. W. Cayley. J. I. McKenzie, A. Copp, S. Nelson and T. N. Gibbs.

The Company had been organized under the General Telegraph laws of the Dominion; but in 1871 the passage of a special act of incorporation was secured to clear away the debris of the former. In 1874 a further act was passed which granted the same rights and privileges enjoyed in the Provinces of Ontario and Quebec, to the Eastern Provinces. The Company's lines terminated at Oswego, Buffalo, Detroit and Quebec and embraced 3,660 miles of line, 7,162 miles of wire and 366 offices. Its connections in the United States were with the Atlantic and Pacific and Vermont International Telegraph Companies. The Dominion Telegraph Company also had a contract for a term of years with the Direct United States Cable Company, which secured it the European business of that

SESSIONAL PAPER No. 20f

Company for Canada. The Company finally extended its lines through Canadian territory from the cable landing at Tor Bay, Nova Scotia, via Halifax to Quebec by way of Pictou, New Glasgow, Guysboro, Cape Canso and Antigonish, to complete which \$300,000 in bonds were issued.

The capital of the Dominion Telegraph Company was now \$700,000. It had a pole mileage of 5,142, wire mileage 11,501, number of offices 608 and, at the time of amalgamation with the Great North Western Telegraph Company, the Board of Directors was as follows:—

Directors.—Hon. T. N. Gibbs, President; John I. McKenzie, Vice-President; Jas. Michie, Treasurer; Thos. Swinyard, Managing Director, and Hon. Wm. Cayley, W. F. McMaster, A. Copp and Lawrence Olyphant. *Local Directors.*—M. H. Gault, Montreal; and A. Joseph, Quebec. *Executive Officers.*—Thos. Swinyard, General Manager, Toronto; and Fred. Roper, Secretary, Toronto. *Divisional Superintendents.*—H. Neilson, Toronto; C. R. Hosmer, Montreal; T. C. Elwood, Toronto, and D. R. McQuarrie, Halifax.

THE GREAT NORTH WESTERN TELEGRAPH COMPANY OF CANADA

The Great North Western Telegraph Company of Canada was incorporated by act of Parliament of Canada, May 7th, 1880, with a capital of \$400,000. The Provisional Directors were:—Hon. John Norquay, Hon. Alex. Morris, Hon. A. G. Bannatyne, Hon. C. P. Brown, J. S. Aikins, E. P. Leacock, H. S. Donaldson, C. MacDonald, J. Anderson, G. A. Kirkpatrick, T. Swinyard, Hon. Dr. Schultz, F. W. Strange, J. G. Haggart, A. Markham, and James J. Foy.

In 1881 the stock of the Company was purchased by a new propriety who, on the 30th of August, 1881, elected directors as follows:—Erastus Wiman, Hon. Wm. McDougall, Adam Brown, W. Gooderham, D. H. Bates, James Hedley, O. S. Wood, Richard Fuller, and A. S. Irving.

Mr. Erastus Wiman, of New York, was elected President, and Mr. O. S. Wood, of Montreal, Vice-President. Mr. Harvey P. Dwight, who had for many years been Western Superintendent of the Montreal Telegraph Company, was appointed General Manager; Frederick Roper, Secretary of the Dominion Telegraph Company, was chosen Secretary and Auditor, and Mr. Arthur Cox, Treasurer.

Acting under the powers conferred by the charter of the Company, a lease was effected of both the lines of the Dominion Telegraph Company and the Montreal Telegraph Company, and the Great North Western Telegraph Company assumed full charge and control of both. The former consisted of over five thousand miles of poles and nearly twelve thousand miles of wire, and the latter of about seventeen thousand five hundred miles of poles and thirty-two thousand miles of wire. These extended systems were merged under one management and in friendly alliance with the Western Union Telegraph Company.

The President of the Great North Western Telegraph Company, Mr. Erastus Wiman, and to whom its organization is chiefly due, was born in Churchville, Ontario, in 1834.

Mr. Wiman's interest in the telegraph owed its origin to an acquaintance with Mr. Dwight, and it was through Mr. Wiman's active influence and labour that the Dominion and Montreal Telegraph Companies became finally organized

3 GEORGE V., A. 1913

into the Great North Western Telegraph Company and which led to his election as a Director of the Western Union Telegraph Company. It had been the design of the original incorporators of the Great North Western Telegraph Company to establish the headquarters of the Company at Winnipeg, Manitoba; but this idea was soon abandoned. The natural headquarters were at Toronto, and were placed there. At the close of 1884 the records of the Company showed:—Miles of poles, 22,507; Miles of wire, 44,058; Offices, 1,992; Employees, (Males, 2,817, Females, 210), 3,207; and Messages, 2,422,298.

The uniform tariff over the Company's lines between offices in the Provinces of Ontario, Quebec and New Brunswick during the day is 25c for ten words and at night 25c for twenty five words. Between offices not over twelve miles apart, 15c for ten words day or night alike. Press rates 25c for one hundred words.

At the formation of the Great North Western Telegraph Company, the Superintendents were as follows:—Angus Grant, Montreal; N. W. Bethune, Ottawa; Ben B. Toye, Toronto; Edwin Pope, Quebec; Warren Dow, Plattsburg, N. Y. and H. McDougall, Winnipeg; R. F. Easson, Supt. of Reports, Toronto; W. S. Battin, Assistant to General Manager, Toronto; and J. Poustie, Supt. of Construction and Maintenance, Montreal.

The lines in Canada, especially those belonging to the Montreal Telegraph Company, have always been noted for excellence and solidity of construction. Galvanized wire imported from England was first used on the lines between Montreal and Quebec, and nothing inferior has ever been employed. Heavy copper wire is now used on some of the longest and most important circuits, and its offices are equipped with all the latest and most modern telegraphic inventions and appliances. This whole system is now under the closest alliance with the Western Union Telegraph Company and from its business centres, such as Toronto, Hamilton, Ottawa, Montreal, Quebec and Winnipeg, direct wires connect with the chief cities of the United States.

Mr. Erastus Wiman died at St. George, Staten Island, New York, on February 9th, 1904. He had resigned from the Presidency of the Great North Western Telegraph Company some years prior to his death, and Mr. H. P. Dwight succeeded him to this office with the title of General Manager and President. In October, 1903, Mr. Dwight resigned from the General Managership of the Company but retained the Presidency, which office he held up to the time of his death, which occurred at Toronto on July 4th, 1912.

On the retirement of Mr. Dwight from the General Managership of the Company in October, 1903, Mr. Isaac McMichael was appointed in his place, with headquarters at Toronto. Mr. McMichael was a Canadian by birth, having been born in Brantford, Ontario, but an American by training.

On the death of Mr. McMichael, in 1911, Mr. Geo. D. Perry, who had been an official of the Company since its re-organization in 1881, was promoted from the position of Secretary-Treasurer to that of General Manager. The Executive officials of the Company are now:—Adam Brown, Vice-President; Geo. D. Perry, General Manager; A. C. McConnell, Secretary and Auditor and D. E. Henry, Treasurer.

SESSIONAL PAPER No. 20f

ACKNOWLEDGMENT.

I desire to acknowledge my gratitude to Mr. McConnell and Mr. Eason for the preceding historical sketch, the value of which is beyond question. Statistical information respecting the Great North Western Telegraph Company will be found in the subjoined tables.

THE CANADIAN PACIFIC.

The Canadian Pacific operates a commercial telegraph service under its corporate rights as a railway. Organization took place on 17th February, 1881. The control of telegraph interests is not separate from the control of the railway, and the officers are in each case the same. The Company has the largest wire mileage in the Dominion, and carries on operations in all the provinces, with the single exception of Prince Edward Island. It has not absorbed the interests of any other telegraph organization; but has proceeded from the start on an independent and self-contained basis. Information with respect to the property and business of the Company is given in the body of this report.

The capital liability of the telegraph interest is wrapped up in the stocks and bonds of the railway. The gross revenue from operation was \$3,009,767.84 in 1912, against which there were operating expenses of \$1,435,944.28. The net balance was handed over to the railway Company.

During the original construction of the Canadian Pacific Railway on the Lake Superior Division and Western Lines, a small amount of telegraph business was handled for the general public. On January 1st, 1886, a Telegraph Department was formed, with Mr. C. R. Hosmer, as Manager, and in September of the same year the department opened up for general commercial business from Montreal to the Pacific Coast. Almost from the start it was evident that the department would prove a success.

Up to December, 1899, the official staff consisted of the Manager, four Superintendents, Chief Electrician and Assistant and four Superintendents of Construction; but the business had grown to such an extent that it was deemed necessary to have the following official staff:—Manager of Telegraphs, Mr. James Kent, who succeeded Mr. Hosmer in December, 1899; Assistant Manager of Telegraphs, General Superintendent of Western Lines, eight Superintendents and twenty-one Assistants or Inspectors.

The plant has increased from 4,964 miles of poles, 16,790 miles of wire and 435 offices in 1887, to 13,386 miles of poles and cable, 87,703 miles of wire and 1,424 offices in 1912. The traffic increased from 567,840 messages sent in 1887, to 4,286,009 in 1912. In 1887 the lines were extended eastward to the City of Quebec, in 1888 to St. John, N.B., and in 1889 to Halifax and Canso, N.S., where they connect with the deep sea cables for Europe. In 1893 the lines were further extended eastward to Sydney and Louisburg in Cape Breton. Extensions were also made throughout other parts of Canada over all new branches of the Canadian Pacific Railway, and lines acquired by that company as well as over some roads belonging to other companies, and the Canadian Pacific Railway telegraph lines now reach every point of any importance throughout the Dominion of Canada either by its own wires or by direct connection with the Government lines.

The Department has direct connection and working arrangements with the Commercial Cable Co. for Europe and beyond; with the Halifax and Bermudas Co. for Bermuda and the West Indies; with the Pacific Cable Board for Australia,

3 GEORGE V., A. 1913

New Zealand, Fanning Island, etc.; and through the Postal Telegraph-Cable Co., with the Commercial Pacific Co. for Japan and China; with the United States and Hayti and the New York Havana Co. and via Galveston for the West Indies and South America.

Connection is made with the Postal Telegraph-Cable Company at Sumas, B.C., North Portal, Sask., Emerson, Man., Sault Ste. Marie, Mich., Detroit, Mich., Niagara Falls, Ont., Morristown, N. Y., Richford, Vt., and Mattawamkeag, Me., through wires being worked between cities in Canada and leading cities in the United States. The Executive of the department realized that in order to give the best service it was necessary to work through wires between the leading points, and at first for all such wires put up No. 6 BW. gauge iron wire. This wire was found satisfactory for distances up to 1,400 miles (with 2 automatic repeaters) when there were only a small number of wires on the poles; but the traffic has increased to such an extent that it was found advisable to work wires through from Montreal to Vancouver, and in order to do so it was necessary to use copper. Copper wire weighing 300 pounds per mile was therefore erected for this purpose and the time saved in the handling of traffic between Eastern Canada and the Pacific Coast was so noticeable that additional copper wires were put up. For some years back all new circuits of any importance have been constructed of copper. At the end of 1911, 42% of all the wire in service was copper, and 20% heavy iron wire, the remaining 38% being for local circuits.

In 1888 one wire (worked duplex) between Montreal and Winnipeg was sufficient to carry all the traffic between Eastern Canada and points west of the Great Lakes, as well as a considerable amount of traffic between the Eastern States and the Pacific Coast States. At present there are two wires worked between Montreal and Vancouver, three from Toronto to Winnipeg, four from Montreal to Winnipeg, three from Winnipeg to Vancouver, all worked duplex which doubles the capacity of each wire; besides which there are other wires for shorter distances. The Telegraph Department has offices in the Company's own buildings at Quebec, Montreal, Fort William, Moosejaw, Calgary, Lethbridge, Revelstoke and Vancouver and there are now being erected new office buildings in Toronto, Sudbury, while buildings are projected in Winnipeg and Edmonton. All the larger offices are equipped with either motor-generators or storage battery.

WESTERN UNION.

The Western Union Telegraph Company was incorporated by the Legislature of the State of New York in April, 1851, and represents at the present time the consolidation of a considerable number of telegraph interests in the United States and Canada.

The official organization of the Company on June 30 last was as follows:—President, Theodore N. Vail; Vice Presidents, Newcomb Carlton, J. B. VanEvery, G. W. E. Atkins and Thomas F. Clark. Directors, Oliver Ames, Boston, Mass; Union N. Bethel, New York City; Henry A. Bishop, Bridgeport, Conn; Robert C. Clowry, Henry P. Davison, Chauncey M. Depew; James Stillman, Harry B. Thayer. Theodore N. Vail, Henry Walters and John I. Waterbury, New York City; Robert Winsor, Boston, Mass; Harris C. Fahnestock, Henry M. Flagler, Robert M. Galloway, Edwin Gould, George J. Gould and Edward J. Hall, New York City; Henry S. Howe, Boston, Mass; John J. Mitchell, Chicago, Ill; Thomas H. Hubbard, Edward T. Jeffrey, Charles Lanier, Lewis Case Ledyard, Robert S. Lovatt, William H. Moore, J. Pierpont Morgan, Jacob H. Schiff and Joseph J. Slocum, New York City.

SESSIONAL PAPER No. 20f

Secretary, William H. Baker; Treasurer, A. R. Brewer; General Counsel, Rush Taggart; General Attorney, George H. Fearons; General Auditor, E. Y. Gallaher; General Manager, B. Brooks. The official address of the Company is 195 Broadway, New York City.

The control of the Company is vested in the stockholders, of whom there were 12,461 on June 30, 1912. Each share of stock represents one vote.

The capital of the Company consists of 1,000,000 shares of common stock of the par value of \$100 each. The total par value of stock outstanding on June 30 was \$99,817,100. The annual dividend is at the rate of three per cent, and amounted to \$2,991,823.50 for 1912.

The funded debt of the Company on June 30 was \$28,745,000, on which interest is paid at the rate of $4\frac{1}{2}$ and 5 per cent, according to the stipulation in the bond. The Company also holds the bonds of leased companies liability on which it has assumed, to the amount of \$3,857,000.

The cost of real property and equipment up to June 30, 1912, was \$136,251,623. The total assets were \$167,555,333.28.

It has not been practicable to separate the capital liability of the Company nor the value of real property and equipment as between Canada and the United States.

The operations of the Company in Canada are chiefly in the provinces of Nova Scotia, New Brunswick and Prince Edward Island. It has minor interests in Quebec and British Columbia.

The gross revenue of the Company from Canadian business in 1912 was \$354,888.19, and operating expenses amounted to \$266,828.81.

THE NORTH AMERICAN.

The North American Telegraph Company operates a comparatively small mileage in the district about Kingston, Ontario, and is controlled by the Bell Telephone Company. Its officers, with the exception of the Secretary-Manager, are the officers of the Bell Telephone Company. It was organized in 1886, with a capital of \$200,000, all of which was used for property and equipment.

Although in 1912 there was a balance as between gross revenue and operating expenses of \$12,348.26, the Company did not declare a dividend.

THE CANADIAN NORTHERN.

Although the Canadian Northern Telegraph Company has a separate corporate existence, it is directly identified with the Canadian Northern Railway Company. The affairs of the two companies are practically identical, and the head offices are at Toronto. The capital of the Telegraph Company consists of \$500,000 in common stock, on which a dividend has not been declared, and \$800,000 of first mortgage bonds, on which the rate of interest is five per cent. Organization took place on June 30, 1902.

The operations of the Company follow more or less closely the railway line, and are distributed over the provinces of Ontario, Manitoba, Saskatchewan and Alberta.

The gross revenue in 1912 was \$226,445.45, and the operating expenses were \$108,143.11. The report of the Company does not show what disposition was made of net earnings.

3 GEORGE V., A. 1913

THE GRAND TRUNK PACIFIC.

This Company was organized on November 8, 1906, with a capitalization of \$100,000 in the form of common stock. The control is vested absolutely in the Grand Trunk Pacific Railway Company, which provided and owns all the real property and equipment. The officers are the officers of the railway company, and headquarters are at Montreal.

The Grand Trunk Pacific Telegraph Company is being operated 'under construction,' as is the railway, and net earnings are applied for the reduction of the cost of construction. The balance thus dealt with in 1912 was \$7,127.93, out of gross earnings of \$55,392.47.

The Company has a considerable wire mileage in the provinces of Ontario, Manitoba, Saskatchewan, Alberta and British Columbia; but its operations are almost wholly along the line of the railway.

THE T. & N. O. TELEGRAPH.

The Temiskaming & Northern Ontario Railway, which is owned and operated by the Government of Ontario, provides a commercial telegraph service along its right of way in the Northern sections of the province. The business done, while relatively small, is of material consequence to the districts in which telegraph facilities are thus provided. The net earnings for 1912 were \$26,941.78, out of gross earnings of \$38,932.03. The headquarters of the T. & N. O. Railway are at Toronto. Mr. A. J. McGee is the Secretary of the Commission.

GOVERNMENT TELEGRAPH SERVICE.

The Dominion Government first established a telegraph service in 1879. Mr. F. N. Gisborne was made Superintendent. The primary purpose was to aid navigation, and to establish telegraphic connection with remote points along the Gulf of St. Lawrence and Atlantic coast. In the Northwest Territories lines were run across the prairies for the purposes of the Mounted Police. The opening up of the Yukon in 1896 led to the construction of several thousands of miles of line into the new mining country. For all the purposes of the Government Telegraph Service 8,383 miles of wire have been strung on 7,883 miles of poles. In addition there are 256 miles of submarine cable.

It was not in any direct sense intended that the Government Telegraph Service should be used for commercial purposes; but it has been made use of in greater degree year by year. The gross revenue in 1912 was \$200,330.20, against which, however, was an operating cost of \$505,731.73.

Mr. D. H. Keeley, of the Public Works Department, Ottawa, is the Superintendent of the Government Telegraph Service.

Facts with regard to pole and wire mileage, and the distribution by provinces will be found in the proper table in the body of this report.

CABLE COMPANIES.

Six Cable companies have a terminus in Canada—five on the Atlantic coast and one on the Pacific. They are all controlled by foreign interests, and several of them merely land at Canso, in Nova Scotia, because of geographical considerations. Reports have been received from five of these cable companies, and three of them relate wholly to capitalization. These three are under

SESSIONAL PAPER No. 20f

the control, by lease or other arrangement, of the Western Union Telegraph Company, and the results of operation are involved in the statistics of that Company.

The Pacific cable was constructed, and is owned and operated by a partnership of Governments—Great Britain, Australia, Canada and New Zealand. It lies between Bamfield in British Columbia, and Australia, with a bifurcation to New Zealand. Canada is not only one of the owners, but to Canada belongs the distinction of having projected the Pacific Cable and urged its construction upon the Governments which now constitute the owning partnership. It was in 1893 that Sir Mackenzie Bowell, at that time Minister of Trade and Commerce in the Canadian Government, undertook what has been officially described as the Mission to Australia. He was accompanied by Sir Sandford Fleming, who was the originator and persistent advocate of the Pacific Cable. As one of the results of that mission the Colonial Conference of 1894 took place in Ottawa. The construction of a cable between Canada and British Colonies in the South Seas was endorsed by the Conference. Positive action was not taken, however, until 1900, following the Imperial and Colonial Conference of that year, at which Sir William Mulock represented Canada. The Pacific Cable Act was adopted by the Imperial Parliament in 1901, and the laying of the cable began within a year thereafter.

The essential features of the partnership agreement under which the Pacific Cable was constructed and is operated may be briefly stated. The capital cost of £2,000,000 was raised by a Board styled in the Act 'The National Debt Commissioners,' the repayment of which is to be by a terminable annuity at the rate of £77,540.18.0—which includes interest at 3 per cent. The first payment was made in 1903 and the last will be due in 1952. This fund, plus whatever deficit may arise from operation, is to be made up annually by the Government partners in the following proportions: Great Britain, five eighteenths; Canada, five eighteenths; Australia, six eighteenths and New Zealand, two eighteenths. The larger share falling upon Australia is due to the fact that at the time of the agreement the Commonwealth had not been formed, and three of the States had each assumed two eighteenths of the obligation. Canada's payment in 1912 was \$55,000 in round figures. The Pacific Cable has been in operation since 1902, and the volume of business has grown steadily. The Board has leased from the Canadian Pacific Railway a land line running from Bamfield, B. C. to Montreal, which has facilitated the transmission of messages between Great Britain and the Antipodes.

THE MARCONI WIRELESS.

The Marconi Wireless Telegraph Company of Canada occupies a field by itself. It can neither be classified with companies which operate a cable nor, with companies which operate a land line, although its functions partake of the character of both. The Canadian Company was organized in 1903, and was in many respects the pioneer organization in the realm of wireless development. The primary experiments in cross-Atlantic wireless telegraphy were carried on in Canada, the first station having been erected near Glace Bay in Nova Scotia. This experimental work was aided by the Dominion Government, and to that extent distinction attaches to Canada.

The Marconi Wireless Telegraph Company has headquarters at Montreal, and on the 30th June last its officers were:—President,—Andrew A. Allan; Vice-President—G. Marconi; Directors—J. N. Greenshields, Robert Bicker-

dike, Godfrey C. Isaacs, and G. M. Bosworth; Secretary treasurer—Alex. E. Reoch; General manager—J. H. Lauer. The capitalization of the Company is \$5,000,000.

CAPITAL AND COST.

The capital liability of telegraph companies operating in Canada was reported at \$202,580,365, of which \$160,342,873 was represented in stocks, and \$42,237,492 in bonds. The statements which created this total related to several companies having headquarters outside the Dominion; on the other hand, capital liability was not attached to the Canadian Pacific, the Temiskaming & Northern Ontario, and the Dominion Government Telegraph Service.

Of the distinctly Canadian Corporations, the capital liability was made up as follows:—

	Stocks.	Bonds.
	\$	\$
Canadian Northern Telegraph Company..	500,000	800,000
Grand Trunk Pacific Telegraph Company...	100,000	
Great North Western Telegraph Company	500,000	
Marconi Wireless Telegraph Company.....	5,000,000	
North American Telegraph Company.....	200,000	
Total.....	6,300,000	800,000

The cost of real property and equipment was put down at \$184,149,677, of which a large percentage had reference to foreign organizations. The figures of Canadian Companies were as follows:—

Canadian Pacific Railway Company.....	\$6,696,421
Dominion Government Telegraph Service....	1,975,000
North American Telegraph Company.....	57,522
Pacific Cable Board.....	87,133
Temiskaming & Northern Ontario.	84,250
Total.....	\$8,900,326

The foregoing figures require explanation. In the first place, the alleged cost of the telegraph property of the Canadian Pacific Railway Company is an appraisalment of present value. The actual outlay was probably much lower, and the Company does not assume any responsibility in connection with the valuation. It is claimed that a separation was not made at the time of construction as between the cost of railway and commercial lines. Moreover, in some cases the same wires are used for both purposes. The cost of the Dominion Government Telegraph Service is also an estimate. The figures attached to the Pacific Cable Board relate wholly to expenditures in Canada. The cost of the whole work was in excess of \$10,000,000.

REVENUE AND OPERATING EXPENSES.

Revenue from operation for the year ended June 30, 1912, amounted to \$5,216.170.92. These figures relate wholly and definitely to Canadian business, with this qualification: So far as the Western Union Telegraph Company is

SESSIONAL PAPER No. 20f

concerned, it was not possible to give exact information. The best that could be done under the circumstances was to make an arbitrary assignment of income and outgo to the Canadian end of the business. In doing this, there is cause for the inference that too low an apportionment was made of Canada's share in the business of the Company, to which might have been added the immense volume of telegraph business which passed through the offices of the three cable companies in Canada and which are operated by the Western Union. It is hoped to have a better adjustment made for the current year.

The total revenue was made up as follows:—

Canadian Northern Telegraph Company.....	\$226,445 45
Canadian Pacific Railway Company.....	3,009,767 84
Dominion Government Telegraph Service....	200,330 20
Grand Trunk Pacific Telegraph Company....	55,392 47
Great North Western Telegraph Company...	1,161,414 92
Halifax & Bermudas Cable Company.....	68,805 00
Marconi Wireless Telegraph Company.....	143,018 00
North American Telegraph Company.....	26,331 42
Pacific Cable Board.....	73,861 40
Temiskaming & Northern Ontario Commission	38,932 03
Western Union Telegraph Company.....	354,888 19
Total.....	\$5,359,188 92

Operating expenses had a total of \$3,379,336.96, and were distributed among the reporting organizations as follows:—

Canadian Northern Telegraph Company.....	\$108,143 11
Canadian Pacific Railway Company.....	1,435,944 28
Dominion Government Telegraph Service....	505,731 73
Grand Trunk Pacific Telegraph Company....	48,264 54
Great North Western Telegraph Company...	839,602 95
Halifax & Bermudas Cable Company.....	26,140 00
Marconi Wireless Telegraph Company.....	148,485 00
North American Telegraph Company.....	13,983 16
Pacific Cable Board.....	122,708 13
Temiskaming & Northern Ontario Commission.....	11,990 25
Western Union Telegraph Company.....	266,828 81
Total.....	\$3,527,821 96

EQUIPMENT.

It was not practicable to assign wire mileage to cable lines; but with respect to land lines the figures disclosed by the various reports received represented a total of 168,017.23 miles. This mileage of wire was divided into the following classes:—

Galvanized.....	116,974 miles
Copper—overhead.....	50,100 “
“ underground.....	254 “
“ submarine.....	689 “

There were also reported 36,218 miles of wire, chiefly copper, as being devoted to multiple operation—that is, the duplex and the quadruplex systems. It is not clear, however, that such mileage is actually over and above the figures in the following table.

The pole mileage amounted to 40.785. Having regard to the wire mileage, it would seem that each pole represented an average of a little over four wires.

The pole and wire mileage was split up among the provinces as follows:—

Province.	Pole mileage.	Wire mileage.
Nova Scotia.....	2,828	9,878
New Brunswick.....	1,867	8,376
Prince Edward Island.....	14	14
Quebec.....	7,515	24,249
Ontario.....	10,514	58,207
Manitoba.....	3,803	18,184
Saskatchewan.....	5,382	21,257
Alberta.....	2,895	14,491
British Columbia.....	3,467	10,571
Yukon.....	2,498	2,713
Total.....	40,785	167,939

The discrepancy of 78 miles between the wire mileage given in a preceding table and the foregoing arose from the impracticablity of classifying that number of miles of cable in two of the reports.

It is manifest that the mileage assigned to Prince Edward Island is wholly inadequate. The reason for the low figures reported is found in the fact that the land lines in that province are almost wholly owned and operated by the Anglo-American Cable Company. Cable companies did not, for obvious cause, report any wire mileage.

PUBLIC SERVICE.

The public service of telegraph companies operating in Canada was represented in the transmission of 9,252,540 land messages and 768,559 cablegrams for the year ended June 30, 1912.

The business of cable companies, as distinct from companies operating a land service, is reckoned in words rather than messages. In so far as the facts are not revealed in the number of cablegrams reported as having been handled by land companies, it was not found practicable for the purposes of this first report to ascertain the number of words transmitted through the cables which have a terminus in Canada. Much of that business, as has been explained, has no reference to Canada. The lines in Canada merely form a link between Great Britain, for example, and the United States. It may be possible for the current year to obtain statistics in relation to the volume of business transmitted in that way. The Pacific Cable Board, however, reported 2,131,376 words, as compared with 1,849,613 in the preceding year.

SESSIONAL PAPER No. 20f

EMPLOYEES.

The total number of employees reported was 4,828. Of these, 2,579 were classified as operators, of whom, 2,413 were males and 166 females.

The salaries and wages paid during the year amounted to \$2,703,032.09, which was equal to 76.7 per cent of the total operating expenses.

CONCLUSION.

It has not been an easy matter to get the facts to which reference has been made in preceding paragraphs. The companies concerned were not prepared to report, and in some cases caused long delays. It is hoped, however, that the data gathered for the year 1912 will at least form a basis for comparisons in years to come which will be helpful and instructive.

The tables which follow will disclose considerable information in detail.

I have the honour to be, sir,

Your obedient servant,

J. L. PAYNE,,

Comptroller of Statistics.

TABLE 1.—Capital Liability, Cost, Gross Revenue and Operating Expenses.

Name of Company.	Address.	Capital Stock.	Funded Debt.	Cost of Real Property and Equipment.	Revenue from Operation.	Operating Expenses.
		\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Anglo-American Telegraph Co., Ltd.	London, Eng.	34,066,666 66		34,066,666 66		
American Telegraph & Cable Co.	New York	14,000,000 00			226,445 45	108,143 11
Canadian Northern Telegraph Co.	Toronto	500,000 00	800,000 00	6,696,421 40	3,009,767 84	1,435,944 28
Canadian Pacific Railway Co.	Montreal			5,909,106 66		
Direct United States Cable Co., Ltd.	London, Eng.	5,909,106 66		1,975,000 00	200,330 20	505,731 73
Dominion Government Telegraph Service.	Ottawa.				55,392 47	48,264 54
Grand Trunk Pacific Telegraph Co.	Montreal	100,000 00			1,161,414 92	839,602 95
Great North Western Telegraph Co. of Canada	Toronto	500,000 00		757,740 00	68,805 00	26,140 00
Halifax & Bermudas Cable Co., Ltd.	London, Eng.	250,000 00			143,018 00	148,485 00
Marconi Wireless Telegraph Co. of Canada, Ltd.	Montreal	5,000,000 00			26,331 42	13,983 16
North American Telegraph Co.	Kingston, Ont.	200,000 00	8,835,491 73	57,521 88	73,861 40	122,708 13
Pacific Cable Board	London, Eng.			84,250 00	38,932 03	11,990 25
Temiskaming & Northern Ontario Ry. Commission	Toronto	99,817,100 00	32,602,000 00	134,515,838 00	354,888 19	266,828 81
Western Union Telegraph Co.	New York					
Total		160,342,873 32	42,237,491 73	184,149,677 40	5,359,186 92	3,527,821 96

SESSIONAL PAPER No. 20f

TABLE 2.—Gross Revenue and the Sources Thereof.

Name of Company.	Local Messages.	Conjoint Messages.	Press Reports.	Market Reports.	Cablegrams.	Money Orders.	Leased Wires.	Miscellaneous
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Canadian Pacific Railway Co.	1,920,027 96	581,223 06	64,478 13	4,514 57	192,473 43	18,405 28	190,092 57	35,552 84
Canadian Northern Telegraph Co.	107,851 65	107,851 64	5,916 12	2,851 04			1,975 00	
Dominion Government Telegraph Service	200,330 20							
Grand Trunk Pacific Telegraph Co.	51,370 94	4,021 53					**81,483 26	33,102 54
Great North Western Telegraph Co.	287,042 95	541,070 58	81,206 96	90,738 59	34,395 85	12,374 19		7,150 00
Halifax and Bermudas Cable Co., Ltd.			1,560 00		60,095 00			170,358 00
Marconi Wireless Telegraph Co. of Can., Ltd.	*44,915 00				127,745 00			
North American Telegraph Co.	2,272 23	13,155 23			253 60	115 38	10,534 98	
Pacific Cable Board.					73,861 40			
Temiskaming and Northern Ont. Ry. Com.	17,149 84	17,734 53			124 03		3,923 63	5,176 01
Western Union Telegraph Co.	120,529 44	120,529 44	2,678 67	333 50	95,765 37	9,875 76		
Total.	2,751,490 21	1,385,586 01	158,839 88	98,437 70	484,713 68	40,770 61	288,009 44	151,339 39

*Ship messages. †Transatlantic. **Includes pole rentals. †Includes subsidies.

TABLE 3.—Operating Expenses.

Name of Company.	Salaries.	Stationery and Printing.	Maintenance of Line and Equipment.	Maintenance of Buildings, etc.	Legal Expenses.	Insurance.	Commissions.	Taxes.	Miscellaneous.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Canadian Pacific Railway Co.	1,160,637 12		79,279 02	*196,028 14					
Canadian Northern Telegraph Co.	75,786 46	5,760 21	456 12						
Dominion Government Telegraph Service.	505,731 73						12,349 98		13,790 34
Grand Trunk Pacific Telegraph Co.	9,913 62	710 41	29,832 46	1,424 93			5,261 73	86 43	1,034 96
Great North Western Telegraph Co.	428,865 16	18,641 49	175,056 40	4,753 21	1,349 40	1,498 42	109,160 52	19,900 62	80,377 73
Halifax and Bermudas Cable Co., Ltd.	14,780 00	605 00	725 00		5 00	120 00		1,205 00	8,700 00
Marconi Wireless Cable Co. of Can., Ltd.	91,691 00	1,780 00	†29,185 00		821 00	2,085 00		1,604 00	21,319 00
North American Telegraph Co.	4,109 93	95 42	846 21	95 00	2 00	256 95	6,059 17	634 20	1,884 28
Pacific Cable Board.	53,814 10	1,352 00	56,964 04	5,568 45				235 00	4,774 54
Temiskaming and Northern Ontario Ry. Com.	1,106 76	644 86					10,238 63		
Western Union Telegraph Co.	237,451 62	1,470 75		†21,176 85					
Total.	2,583,887 50	31,060 14	372,344 25	229,046 58	2,177 40	3,960 37	143,070 03	23,665 25	138,610 44

†Includes maintenance of buildings.

*Expenses of offices.

‡Includes rent and house service.

SESSIONAL PAPER No. 20f

TABLE 4.—Pole Mileage, and Wire Mileage by Classes.

Name of Company.	Address.	POLE MILEAGE.		WIRE MILEAGE.					Multiple.
		Operated by Company.	Operated by Another Company.	Galvanized	Copper.				
					Overhead	Under- ground.	Sub- marine.		
							Miles.	Miles.	
Canadian Northern Telegraph Co.	Toronto....	4,442		13,535	37,516			259.50	32, 878
Canadian Pacific Ry. Co.	Montreal...	13,569	991	49,046	8,383	4		256	
Dominion Government Telegraph Service.	Ottawa....	7,883			1,375				
Grand Trunk Pacific Telegraph Co.	Montreal...	2,080.50		5,503.50	2,418	250		101	3,340
Great North Western Telegraph Co. of Canada.	Toronto....	9,616		31,100					
North American Telegraph Co.	Kingston, Ont....	44		783.50					
Temiskaming and Northern Ontario Ry. Com.	Toronto....	297		1,138	403				
Western Union Telegraph Co.	New York....	2,853		15,868	44.77			472.96	
Total.....		40,784.50	991	116,974.00	50,099.77	254		689.46	36,218

†Aerial Cable. ‡Submarine Cable. §Included in foregoing figures.

TABLE 5.—Messages, Employees and Remuneration.

Name of Company.	Address.	Number of Land Messages.	Number of Cablegrams.	NUMBER OF OPERATORS.		Number Other Officers and Employees.	Salaries and Wages.
				Male.	Female.		
Anglo-American Telegraph Co., Ltd.	London, Eng.						\$ cts.
American Telegraph and Cable Co.	New York.						
Canadian Northern Telegraph Co.	Toronto			34	9	109	75,786 46
Canadian Pacific Railway Co.	Montreal.	4,286,009	456,539	600	93	1,039	1,384,035 42
Direct United States Cable Co., Ltd.	London, Eng.						
Dominion Government Telegraph Service.	Ottawa.						
Grand Trunk Pacific Telegraph Co.	Montreal.	313,626				700	290,000 00
Great North Western Telegraph Co. of Canada.	Toronto.	115,334		5	2	20	40,903 00
Halifax and Bermudas Cable Co., Ltd.	Toronto.	4,170,934	218,437	1,552	44	357	509,221 17
Marconi Wireless Telegraph Co. of Canada, Ltd.	London, Eng.						14,780 00
North American Telegraph Co.	Montreal.	87,528	88,805	120	1		91,691 00
Pacific Cable Board.	Kingston, Ont.	84,804	3,778	47	16	5	4,480 00
Temiskaming and Northern Ontario Ry. Com.	London, Eng.			32		17	53,576 66
Western Union Telegraph Co.	Toronto.	194,305	1,000	23	1	2	1,106 76
	New York.						237,451 62
Total.		9,252,540	768,559	2,413	166	2,249	2,703,032 09

TABLE 6.—Pole Mileage by Provinces.

	Nova Scotia	New Brunswick	Prince Edward Island	Quebec	Ontario	Manitoba	Saskatch- ewan	Alberta	British Columbia	Yukon
	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles
Canadian Northern Telegraph Co., Toronto.....					337	*1,838	1,851	414		
Canadian Pacific Railway Co., Montreal.....	560	372		1,819	3,805	1,592	2,066	1,286	2,069	
Dominion Government Telegraph Service, Ottawa.....	696	78	114	2,065	28					
Grand Trunk Pacific Telegraph Co., Montreal.....										
Great-North Western Telegraph Co. of Canada, Toronto.....		422		3,485	361	303	1,664-50	556	193	
North American Telegraph Co., Kingston, Ont.....					5,639	70	800	639	1,065	2,498
Temiskaming & Northern Ontario Ry. Com., Toronto.....					44					
Western Union Telegraph Co., New York.....	1,572	995		146	297					
Total	2,828	1,867	14	7,515	10,514	3,803	6,381-50	2,895	3,467	2,498

i In Newfoundland. * 43 miles in State of Minnesota.

TABLE 7.—Wire Mileage by Provinces.

	Nova Scotia	New Brunswick	Prince Edward Island	Quebec	Ontario	Manitoba	Saskatch- ewan	Alberta	British Columbia	Yukon
	miles	miles	miles	miles	miles	miles	miles	miles	miles	miles
Canadian Northern Telegraph Co., Toronto.....					1,112	5,844	5,109	1,370		
Canadian Pacific Railway Co., Montreal.....	2,511	2,461		7,922	1,541.50	10,441	13,009	10,267	8,667	
Dominion Government Telegraph Service, Ottawa.....	796	97	†14	2,331	45		800	681	1,162	2,713
Grand Trunk Pacific Telegraph Co., Montreal.....					728	1,253	2,338.50	2,173	386	
Great North Western Telegraph Co., of Canada, Toronto.....		783		10,090	22,350	646				
North American Telegraph Co., Kingston Ont.....					783.50					
Temiskaming & Northern Ontario Ry. (om., Toronto.....					1,541					
†Western Union Telegraph Co., New York.....	6,570	5,035		3,906					356	
Total.....	9,877	8,376	14	24,249	58,207.00	18,184	21,256.50	14,491	10,571	2,713

‡ Aerial and submarine cable mileage not included.

† In Newfoundland.

* 219 miles in State of Minnesota.





